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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/138,926	08/24/1998	FRANK C. CESARE	D-6362	4707

6449 7590 02/20/2003

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WASHINGTON, DC 20005

EXAMINER

NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
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1772

21

DATE MAILED: 02/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n N .

09/138,926

Applicant(s)

CESARE

Examiner

Sandra M. Nolan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Claims***

1. Claims 1-30 are pending.

### ***Most Recent Office Action and Response***

2. The office action dated 21 October 2002 (Paper No. 18) and the response of 06 December 2002 (Paper No. 20) are the most recent substantive actions in the case.

### ***Rejections Withdrawn***

3. The 35 USC 112 rejection of claims 14-30 for indefiniteness, set out in section 4 of Paper No. 18, is withdrawn in view of applicants' arguments on pages 2-3 of Paper No. 20 and the reference therein to pages 5 and 6 of the specification.
4. The 35 USC 103 rejection of claims 1-13 as unpatentable over Allen (EPO 0246745 B1), as stated in section 7 of Paper No. 18, is withdrawn in view of applicants' arguments at pages 3-8 of Paper No. 20.
5. The 35 USC 103 rejection of claims 14 and 23-28 as unpatentable over Frances (US 4,514,541) in view of Allen, as expressed in section 8 of Paper No. 18, is withdrawn in view of the arguments presented by applicants at pages 3-8 of Paper No. 20.

### ***New Rejections***

#### **Claim Rejections - 35 USC § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1-6, 8-10, 14-19, 21-22, and 25-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen et al (US 4,960,829).

Allen teaches compositions containing polybutadiene high molecular weight polymers (col. 3, lines 3-5), reinforcing agents (col. 5, line 46) and polymers that are "liquids at ambient temperatures" (col. 4, lines 1-2) that have number average molecular weights of 1,000 to about 15,000 (col. 4, lines 8-10). The compositions produce precision molded parts having improved physical properties (col. 1, lines 18+).

The lower molecular weight polymers in the Allen compositions contain 25 to 85% ethylene (col. 3, line 53), and 0 to 20% of the non-conjugated diene, such as 5-ethylidene-2-norbornene (col. 2, lines 62 and 65). They also contain alpha-olefins containing 1 to 10 carbon atoms (col. 2, lines 17-19).

Allen's lower molecular weight polymers have virtually the same molecular weights as applicants'.

The examiner deems "ambient" to mean temperatures at which the compositions are processed/cured. Note that the Allen compositions are processed at temperatures of up to 180°C (col. 6, lines 7+) and cured at 165°C and above (col. 6, lines 55+), where applicants' low molecular weight "solid" polymers would be liquids. Accordingly, applicants' low molecular weight polymers are "liquids at ambient temperatures", as Allen teaches.

The needle penetration properties of applicants' claims 9 and 22 are inherent in the low molecular weight polymers of Allen in view of the similarity of the reagents used to make them and their molecular weights.

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Claim 28 is deemed to express intended use and does not serve to distinguish the claimed articles from the Allen articles. The examiner considers a "molded part" to be a molded article.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 7, 11-13, 20, and 23-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Allen.

Allen is discussed above.

It fails to teach the use of more than 20% alpha-olefin constituent in its low molecular weight polymer component or the use of the specific reinforcing or amounts thereof as recited in several of applicants' dependent claims.

It is well known in the polymer art that alpha-olefins are less expensive to produce than non-conjugated polyenes.

In the absence of convincing objective evidence to the contrary, the use of slightly larger amounts of alpha-olefin comonomers in the compositions of Allen would be an obvious way to lower the cost of the molded articles made therefrom.

The motivation to employ more alpha-olefins and less conjugated diene monomer in the low molecular weight polymers of Allen is the high cost of petroleum-based materials, such as non-conjugated polyenes.

It is deemed desirable, from a manufacturer's perspective, to lower the cost of making articles by employing ingredients that cost less when making them.

The use of conventional reinforcers and/or conventional amounts of them is deemed a matter of engineering choice, depending upon the properties desired in the molded articles.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication should be directed to the Examiner, Sandra M. Nolan, whose telephone number is 703/308-9545. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the Examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 703/308-4251. The general fax number for the art unit

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is 703/305-5436. The fax number for after final communications is 703/872-9310. The receptionist answers 703/308-0661.



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Patent Examiner  
Technology Center 1700

SMN/smn  
09138926(21)  
14 February 2003